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## **The Homeless Bird: A Motion Graphics Narrative About Deforestation and Animals.**

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# The Homeless Bird

A Motion Graphics Narrative About Deforestation and Animals.

A Thesis submitted in partial fulfillment of the requirements  
for the degree of Master of Fine Arts in Visual Communication Design.

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December 2014

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## 0.0 Abstract

The Homeless Bird is a short animated story expressing the loss of homes for wildlife due to the destruction of habitats such as deforestation. With the loss of natural habitats each year, many animals have to migrate to areas that are unfit to provide for them. The main goal is to draw attention to this problem and to help encourage the audience to act.

The project concerns the combination of practicing motion graphics design theories and experimenting with available computer graphics integration technologies. The final piece is a 2:55 minute visual story that combines both a fantasy and realistic setting.

### **Keywords:**

Bird, Deforestation, Homeless, 3D, Animation.

# 01 Introduction

This project was inspired by numerous topics such as deforestation and animal abuse. I believe that animals should be treated as human beings and should be able to live as they want. That includes leaving their habitats alone for them to live in peace. Therefore I proposed to create an engaging story that conveys the idea that if people can't leave the habitats alone, then they should at least help rebuild them so that others can live there in the future.

The project links two primary subjects: motion graphics design and the subject matter of the story about the loss of animals' homes. The study includes conveying an idea into a visual presentation, applying design theories to make proper decisions, practicing animation principles to create convincing motions, and experimenting with various production methods to obtain the best time and best visual quality balanced imagery.

## 02 Survey of the Literature

### 2.1 Environment & Modeling

I immediately started searching for the appropriate look and feel for this project in the early stages. One of my main goals of this story is to display visually pleasing and interesting settings as well as show my artistic creativity. To do this I had to overcome both design and technical complications.

My first thought was aimed towards a realistic look, which meant I had to look up many different textures and environments to see what worked best for the layout. But as time passed, I decided to move towards the fantasy feel. To achieve this, I looked up different environments that while they looked realistic, maintained their fantasy style. For example the 2009 film: Avatar featured “floating mountains” where the floating rocks appeared to be a patch of forests simply lifted off the ground to give it a fantasy look.

### 2.2 Texture

As per my committee’s suggestion, I observed the trees and wooded areas in the 2006 animated movie: Over the Hedge. The colors and shadows of the leaves in the movie made the woods appear more natural and contrasted with the colors of the characters, making the character’s colors contrast and add more depth to the background.

### 2.3 Animation

In the process of animating the scenes, in order to build a more believable world to tell the story, I used different kinds of visual references from animated films to real-life observations.

Real-life observation occupied the majority of the motion study. For the bird’s motions, I would watch the small, wild birds from my window and note their movements. Key movements included how they flew, land and take off, and how they hopped along the ground in search of food. In addition, I recorded how people would walk, keeping in mind how they would maintain balance with each step. For the axe swinging motion, I practiced by swinging a pole at a tree, and noted the stance and the flow of the swing and added human characteristics such as blinking and the time between swings. Finally for the clouds, I observed how the clouds changed patterns in different weather situations.

For the things I was unable to observe, or needed a better sense of movement, such as trees falling and a walk cycle key positions, I turned to films and animation. I started with the 2012 version of Dr. Suess's The Lorax to learn the details of the falling trees. For the walk cycle and postures, I watched a tutorial on Digital Tutors and set up controls for the characters based on a moving walk cycle as opposed to a stationary walk cycle that I am used to.

## 03 Process

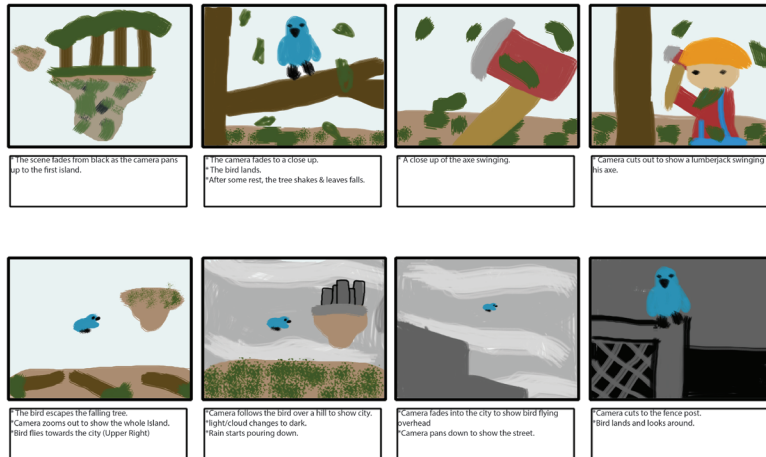
### 3.1 Storyboard

The final version of the story was radically different than the one proposed during the fall 2012 presentation. The original version as presented in the proposal was meant to be on a grand scale, what would happen if massive deforestation were to continue as it were. This view can be arguable as it could be exaggerated. I needed to make more of an impact to the audience by making the issue more personal.

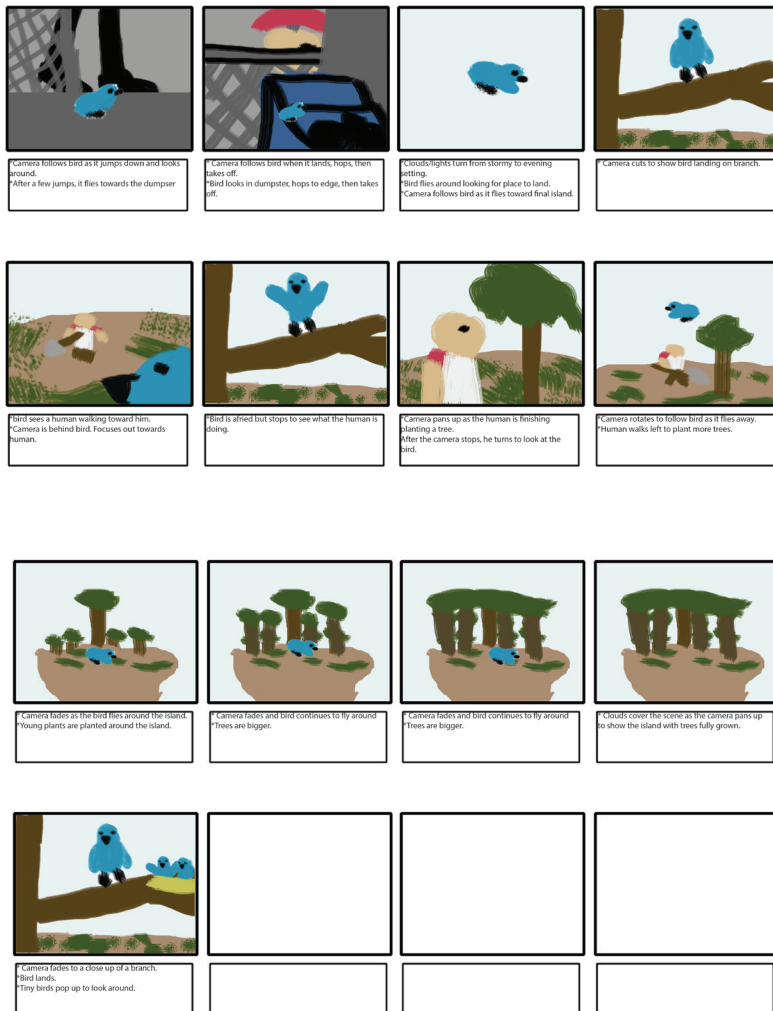
Over a combined total of six months, I worked with the committee to improve the storyboard. It was suggested to make the story more personal and focus on the bird's journey. That way the audience can sympathize with its suffering. I focused on three major areas: the forest, the city, and an area with the single tree. The scenes are drastically different and the audience can connect with those scenes from their experiences in those areas.

The ending was the most difficult to change as I wanted to keep the idea of the bird planting the seed. That way it would seem like he was building a future home and would encourage the secondary characters to do the same. Yet after testing the idea with targeted audience members, having the bird plant the seed and have it grow at a rapid pace detached the shot from the rest of the story. To fix this, I switched the bird planting a seed with a secondary character planting trees around the area. Then there would be a time lapse of the trees growing. The flow was much better as it still fell into the area of reality and would be easier to animate.

## STORYBOARDS



## STORYBOARDS



## 3.1a Final edition of storyboard.

### **3.2 Time line**

#### **Fall 2012**

Research references > 1st edition storyboard > 1st edition modeling

#### **Winter 2013**

2nd edition Modeling

#### **Spring 2013**

2nd edition storyboard > 2nd edition modeling

#### **Fall 2013**

3rd edition storyboard > 3rd edition modeling

#### **Spring 2014**

3rd Edition modeling > Animating

#### **Fall 2014**

Rendering > Composting > Defense > Thesis Show

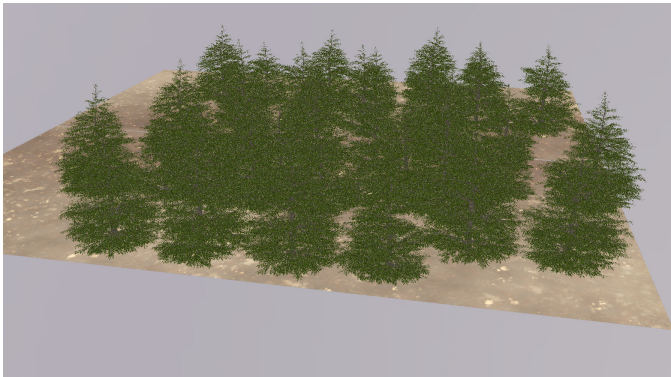
### **3.3 Software**

I started learning Cinema 4D for everything besides modeling. I kept using Maya as I am used to its Modeling system. To learn Cinema 4D, I took an independent study course and watched online tutorials on Digital Tutors and Grayscalegorilla in order to learn advanced techniques such as sculpting, texturing, rigging, and adding Xpressos to the characters.

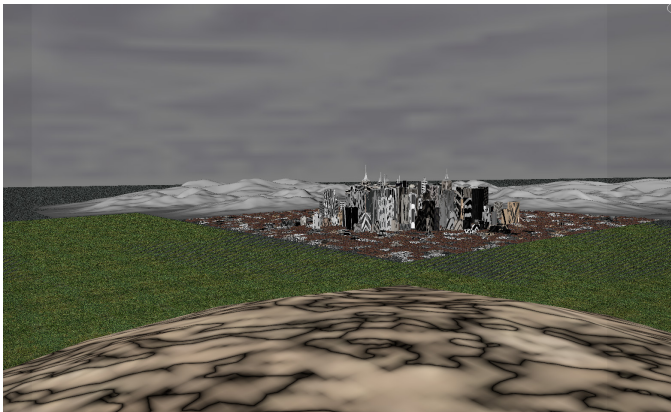
I created the characters and other complex models such as the trash bin and fences in Maya 2012 and imported them into Cinema 4D as .obj files. The trees came from Tree Sketch, an application that creates trees and exports them for 3D programs. The rest of the models such as the environments were built in Cinema 4D. Once imported, I proceeded to add textures, rig, and animate in Cinema 4D as I couldn't export rigs and textures back into Maya.

### 3.4 Environmental Design

I originally wanted to use an infinite landscape to set the film in. The process of doing so was difficult however, as I had to create a massive, time consuming landscape that had trees and displacement in the land, which yielded unsatisfying results. The forest scene required an obscured forest, which would give the sense of a vast landscape, yet I was unable to produce one that had a decent rendering rate. In addition, the pine trees made it difficult to focus on the bird and the leaves made it hard to provide a landing for it. The background in the second scene could have been hidden by the mountains but the render time was too large to render off of. While the third scene had a decent render time, the environment would not have matched the rest of the film as I was in the process of renewing the layout.



3.4a Preview of the 1st generation forest environment.



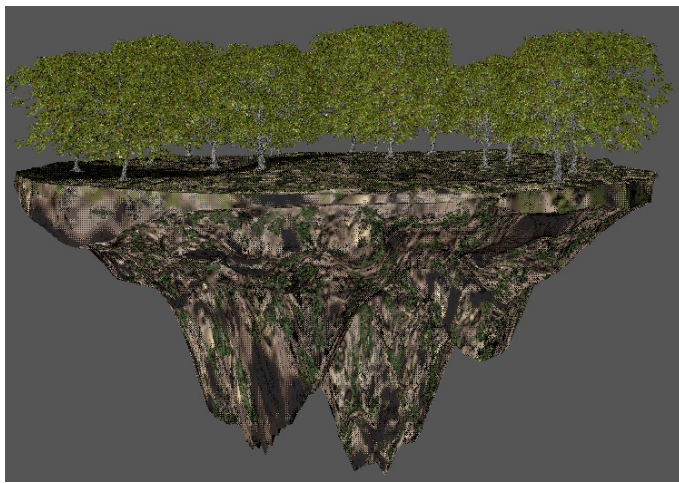
3.4b Preview of the 1st generation city environment.



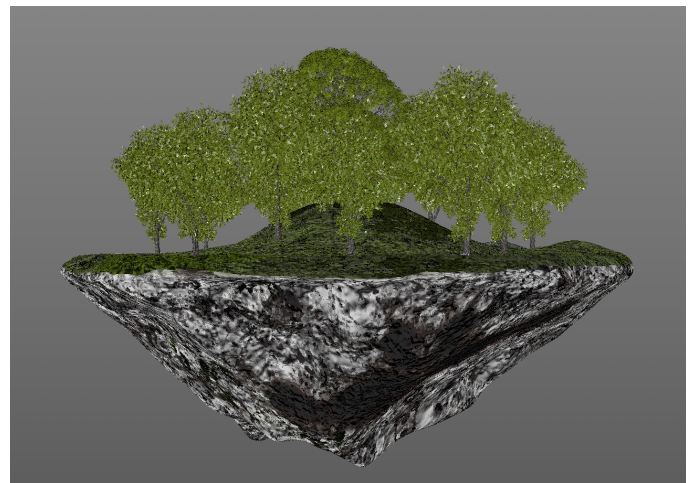
3.4c Preview of the 1st generation last scene environment.



For the second edition of the landscapes, I went with a more fantasy look by just creating an island for each scene. This method lowered the render time and limited space I needed to work from, all while making the environment pleasing to the audience. To create each island, I took a mountainous plane and sewed it to a circular plane. I then added hills by sculpting it with Cinema 4D's sculpting tools. I had to individually adjust the vertices of the circular edges to smooth the islands out and give it a more natural feel (See figures 3.4d and 3.4e). However, I wanted to maintain the idea that these islands seemed to be ripped from the ground so i kept some hard edges in areas. While I wanted to add hairs to the ground as grass, the render time per frame would of been too high. Instead, I added several overlays of green and brown textures to simulate the natural ground.



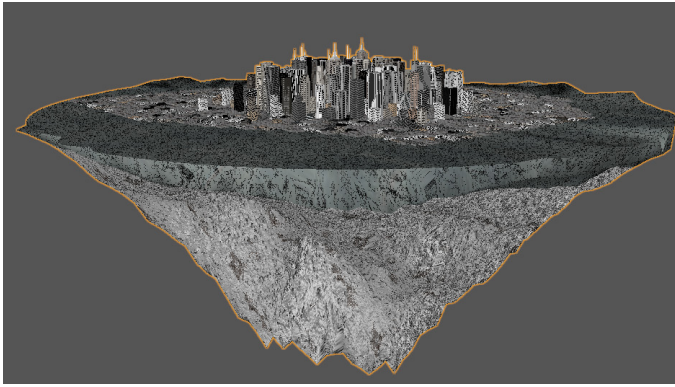
3.4d Preview of the first island.



3.4e Preview of the final island.

## City

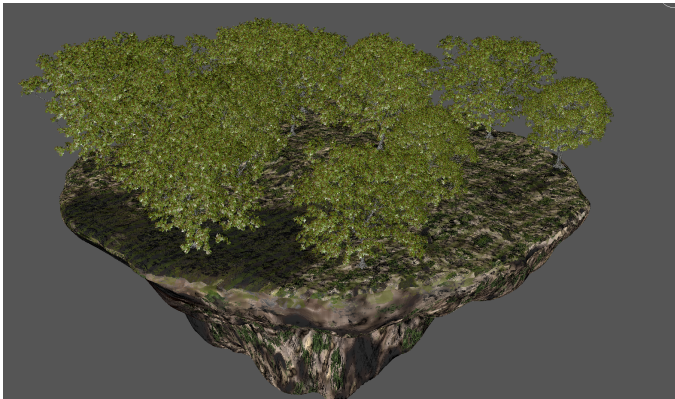
For the city however, the island had to be smooth so that the buildings and streets would be unobstructed. The city itself was modified from Grayscalegorilla's City kit as it is easy to adjust and gives a convincing look. However there were no roads or sidewalks. I had to create or obtain free models from Cinema 4D's library such as traffic lights and sidewalks. While inside the city scene, the number of buildings had to be reduced to reduce lagging during the animating phase and render time. Even the far away shot had buildings hidden on the other side of the city, as they weren't seen.



3.4f Preview of the City island.

## Trees

To truly obtain randomly created trees for the forests, I turned to the Tree Sketch application. It allowed me to design random trees ranging from saplings to giants. I obtained and exported the leaf and bark textures from the application and exported the trees in an .obj format. Once in Cinema 4D, I used the cloner to duplicate the trees and change each of their scales and rotations without intersecting each other, all while staying on the island. The roots are hidden so that when the trees falls, I would not have to go into details of how they would fall. Figure 3.4 shows an example of the trees' layout.



3.4g Preview of the First island.

I was originally going for pine but the thickness of the branches would have blocked the scenery.

I eventually found the right type of tree for the camera to reveal the scene while convincing the audience that it was a natural environment. Instead of leaving the forests a flat color, I added a colorful gradient to the leaves, giving it a subtle change in the outcome of the trees, improving the forest's overall look.

## 3.5 Character Design

### Bird

The leading character had to be a small, helpless animal that the audience can sympathize with. In addition, the character had to be able to travel long distances to create changes in the scenery. So a small, common bird would be the logical choice. I chose blue and white colors as they would be able to contrast with the

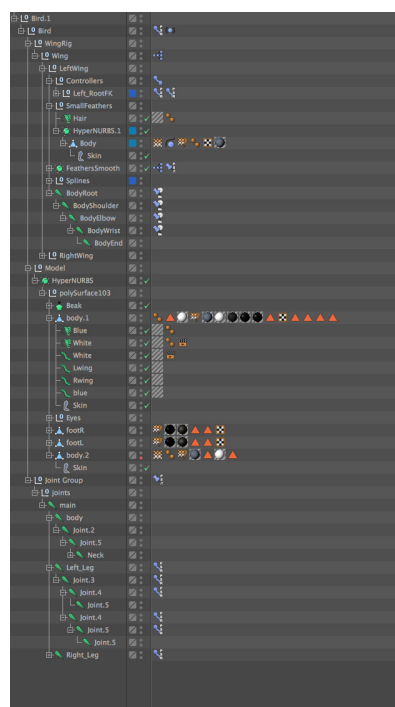
green and brown colors and maintain attention to it.

The Bird is composed of three primary parts: the body, the wings, and the feet. These were done in Maya and then imported them into Cinema 4D to attach the joints to the body, connecting the parts together.

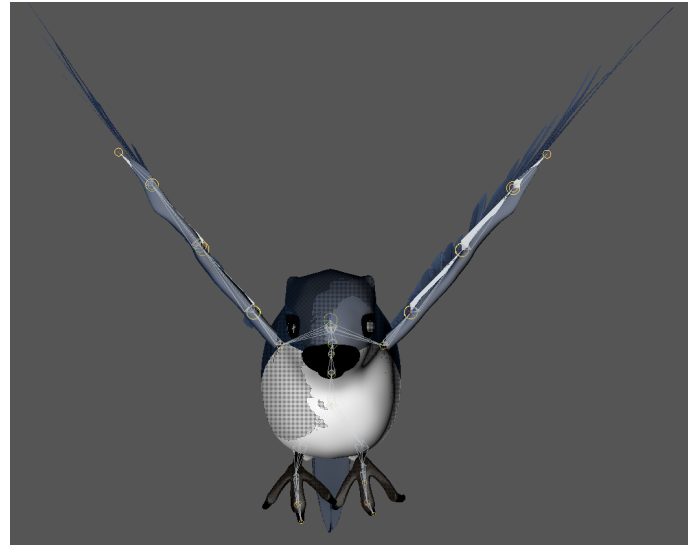
For the wings' design, the primary feathers are actually planes with JPEG images of feathers to overlay them, giving the illusion of actual feathers without increasing render time. The wing joints are controlled via Xpresso (See section 3.7) from the shoulders so they could be folded and move around with ease.

One of the most difficult tasks i faced while creating the bird was adding the feathers for the body and wings. The feathers are composed of around 1 billion hairs on each wing and 4 billion hairs total for the body. Finding a balance between the number/length of hairs and the length of the render time was difficult. Plus when I had to scale the bird up to match certain scenes, I found that while the scale of hairs appeared to increase in the controls, in actuality they did not. Therefore I had to renew the hairs again to cover the models. Then I had to adjust their normals to flow with the model that they're attached to.

Instead of smoothing the characters or adding subdivisons to the surfaces, I added hypernurbs to all of the objects, this method allows me to toggle the smoothness of the objects so I can adjust them whenever needed during the animation process. The green cubes in figure 3.5a shows the hypernurbs option.



3.5a The layout of the bird. The green objects are the joints, while the blue triangles are objects. The hairs (represented by the green lines) are attached to a hidden body labeled "body 2"



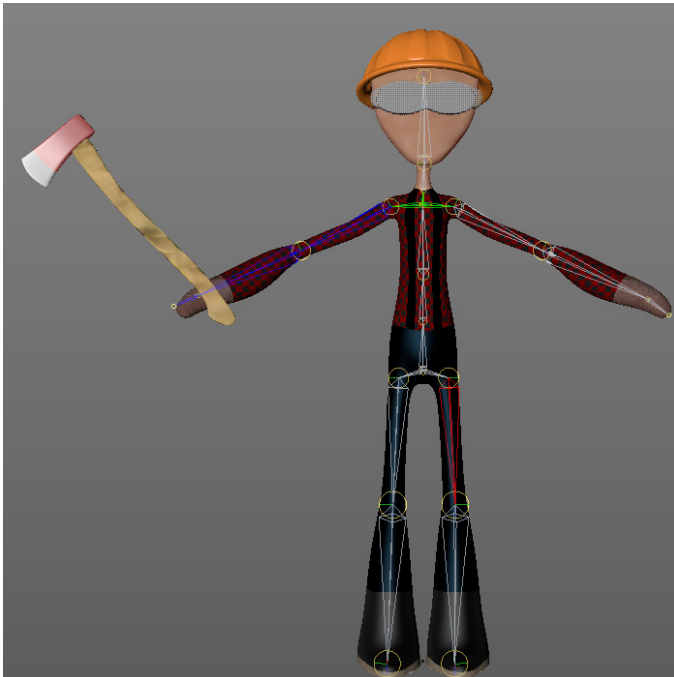
3.5b Preview version of the bird.



## Secondary Characters

While the bird did not change much from the beginning, the secondary characters had to go through two versions to become what is used in the final version.

The original model was designed as a simplified person with no fingers, eyes, mouth, etc. He was meant to be an elongated being, giving him a unique look. My plan was to focus on the Lumberjack model and then adjust it for the city and planter characters.



3.5c Preview of 1st generation Lumberjack.

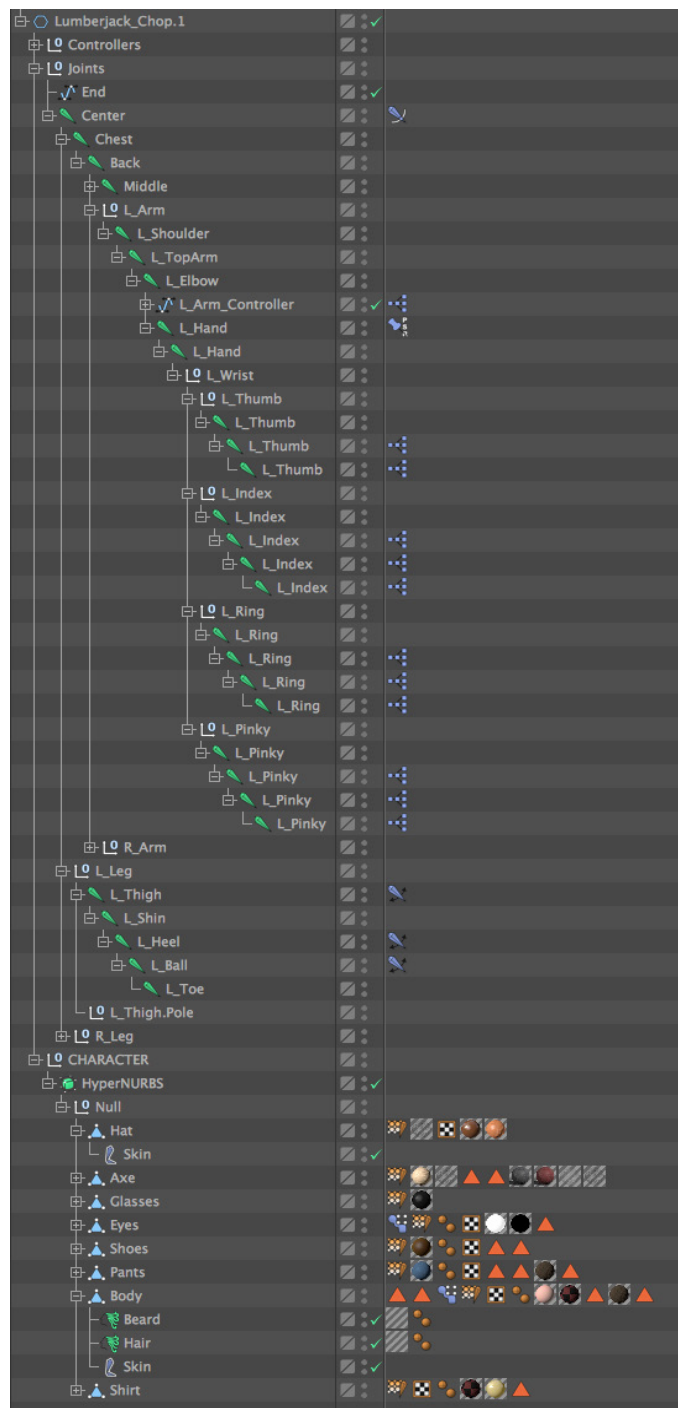
However as I met with my committee members and tested the model with the targeted audience to get feedback, they were not satisfied with the character design. The thin arms in particular made it difficult to see the motions of the character such as while he is chopping the trees. In addition the lack of mouth, nose, and eyes left some wanting more out of the design.

Since the models needed too many changes, I started from the beginning. I designed my own character that emphasized the important features of a human being, such as eyes, hands, and belly while maintaining my own design and without attracting too much attention (See figure 3.5e). I made their actions almost mechanical to symbolize the idea that people do not realize their actions, and act like machines in their daily activities.

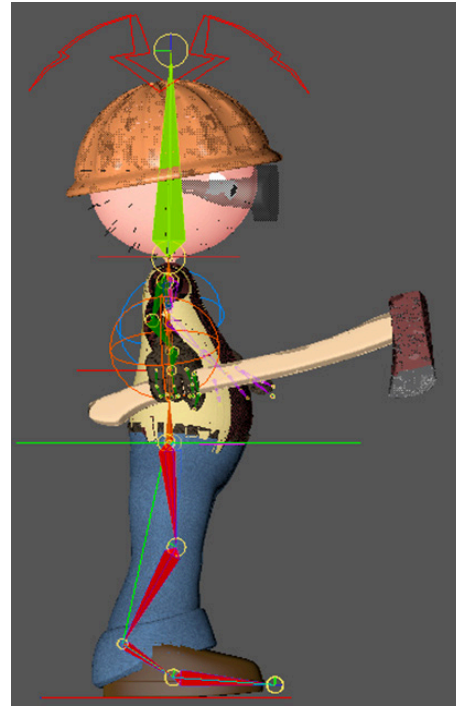
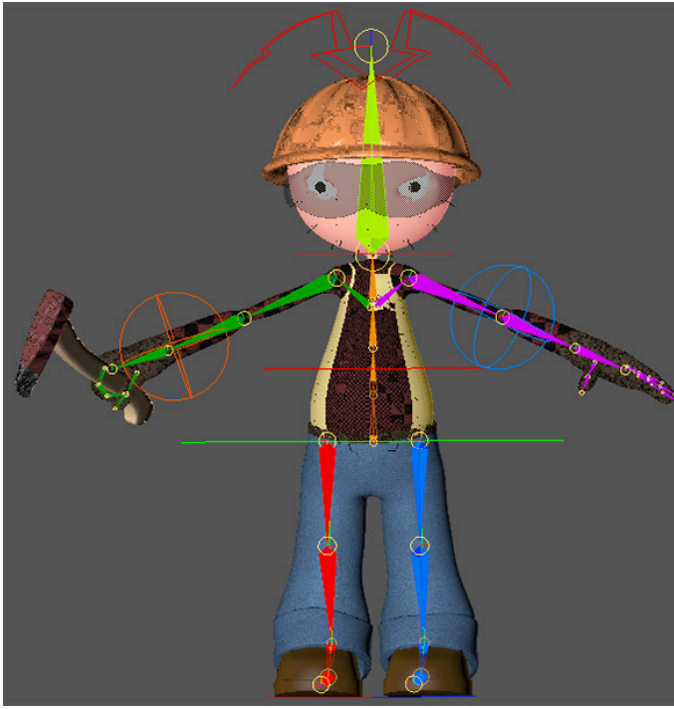


The textures of the secondary characters are made from a combination of procedural textures, overlays, and images of fabric to give the clothes a more natural look to them. To prevent a noticeable pattern of the secondary characters in the city scene, I swapped the clothes and umbrella colors.

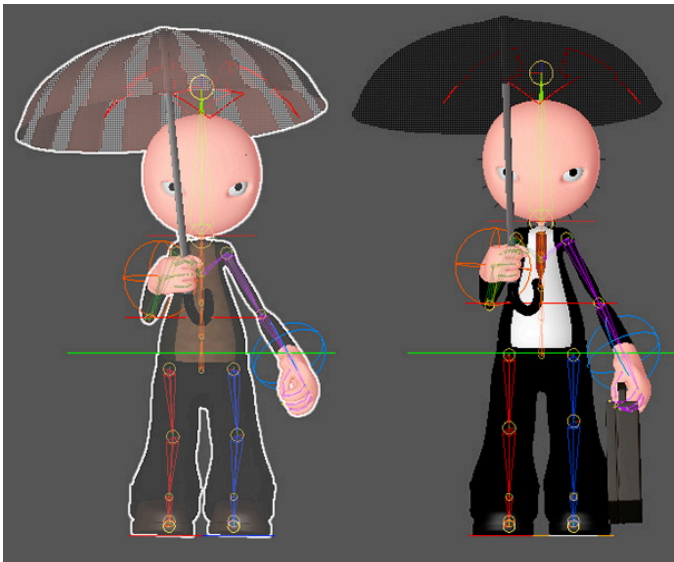
Each of the humans' hairs were made the same way as the bird's feathers but I reduced the number to around 200,000 and made different hairstyles for each model. This created some sense of individuality within each characters.



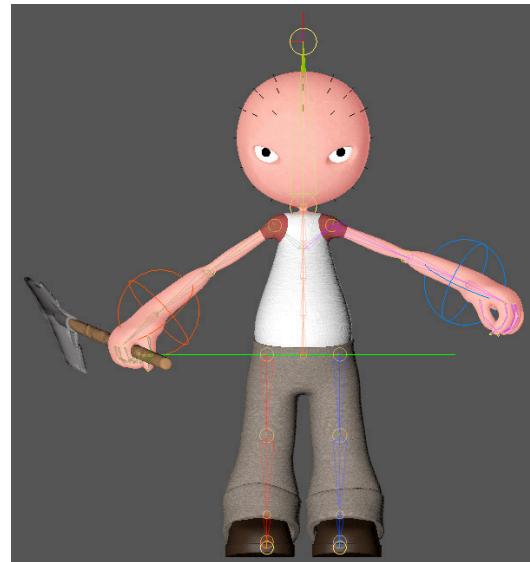
3.5d The layout of the Lumberjack. The other models feature a similar design.



3.5e Preview version of the lumberjacks.



3.5f Preview version of the city characters.



3.5g Preview version of the planter.

### 3.6 Lighting

I wanted to have the light affect the moods of the scenes but at the same time show that time is passing during the film. The first scene is composed of a bright afternoon to bring out the colors of the forest. The second scene quickly turns into rainy weather as the overall colors become dark. Finally once the dark clouds clears, the scene turns into an evening setting giving closure to the whole film. The different light settings reflect the beginning to ending of the film like the daily cycle of morning to dusk.

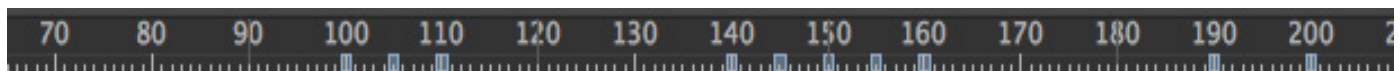
As a main source of light, I used Cinema 4D's Psychical Sky setup. I am able to setup the time of day to make the process of turning from day to night easier for each scene. This light is the primary source of the shadows and the secondary source for color saturation, After Effects color adjustment being the primary. The only time I had to provide additional lighting was in the City as the buildings would block out most of the Psychical Sky's light. By adding additional light and shadows along the road and in the alley, I was able to fix this setback.

As a secondary source of light, there is a sphere surrounding each scene with infinite light points attached to each of the sphere's vertices. This source provides a low, even light to the scene, preventing strong shadows and contrasting sides from appearing on the scene.

### 3.7 Animation

#### Movement

Because of complications in the wing's rigging, I had to systematically adjust the takeoff/land in a certain pattern. So I made the bird take off, forward five frames, unfold the wings to the neutral position and fold the legs, forward another five frames to make the bird start flapping. The opposite happens when landing.



3.7a

- Frame 100, the bird is taking off.
- Frame 105, the wings and feet are folding.
- Frame 110, the wings are now free to flap.

For most of the flying shots, the bird is either stationary and I moved the frames around in After Effects or he followed a spline path. It saved time in rendering and allowed for more control in post-rendering.

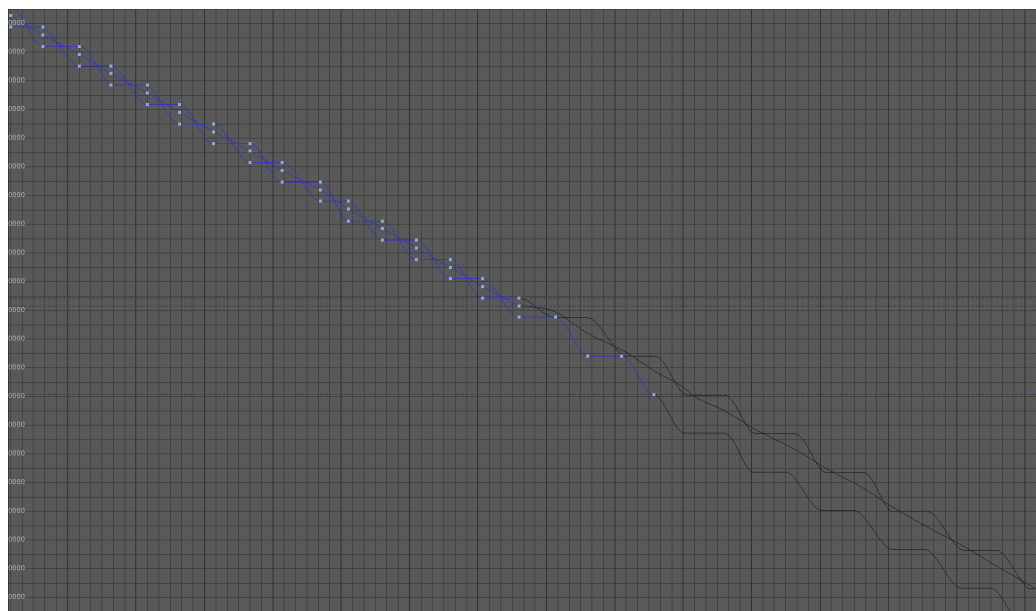
The animation for the secondary characters were more difficult however. The Lumberjack's rigging and model prevented the natural movement as my self-reference chopping. Instead, as per my committee's suggestion, I only animated the top half of the lumberjack's movement (See figure 3.7b). To prevent stretching of the limbs during movement, I separated the legs and arms from the rest of the body. The textures and overlapping of the belly's faces would hide any hint of separation. The other characters did not have much of a variety of motion as they were primarily walking throughout the whole film.





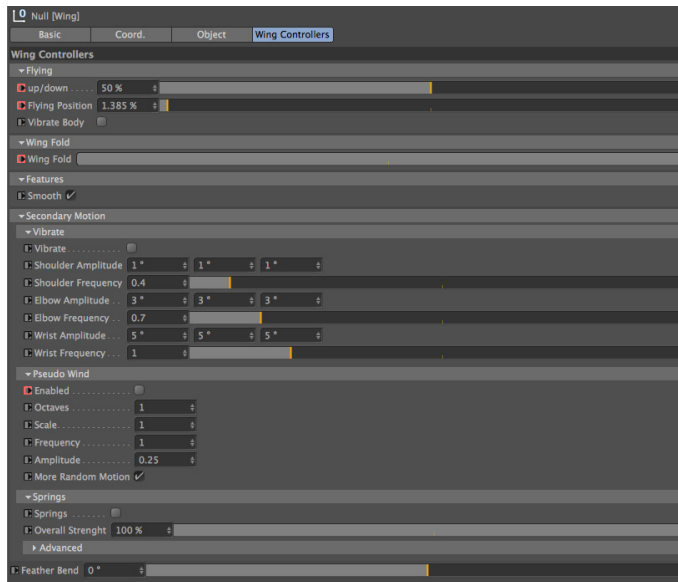
3.7b The Lumberjack's and tree's lower half are cut out of the shot to give focus on the upper half's movement.

Although the walk cycle was setup correctly, it was not without its errors. The human characters are able to walk as they were setup to do. Yet as time passed, the walk-cycles produced unusual errors in later frames (See figure 3.7c). This error would have been noticeable in certain shots so I devised a temporary workaround for this by switching out the characters with different versions of the characters when the camera switched.

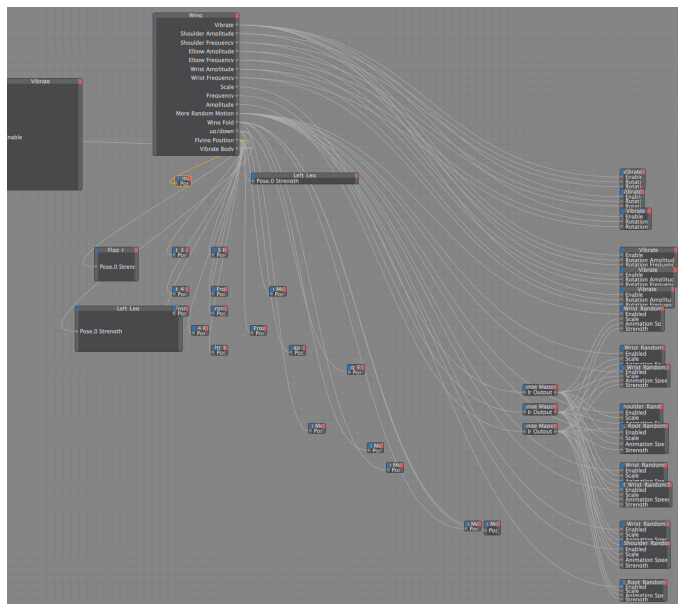


3.7c The F-curve of the walk cycle. The black line represents a continuous motion which increases in distance, resulting in the error.

To save time in the animation process, I added controls to the characters, particularly the bird. However the process of doing so is different in Cinema 4D than what I learned in Maya. I began with Grayscale Gorilla's tutorials on Xpresso connections and then went to Digital Tutors on how to add controls for a bird's wings. The controls mainly focused on the bird's wings as they flap and when they are folded (See figure 3.7d). Another slider controlled the flying position that moved the bird's feet and legs position as well as the overall angle of the bird. Optional features were added such as how the feathers moved in the wind while flying.

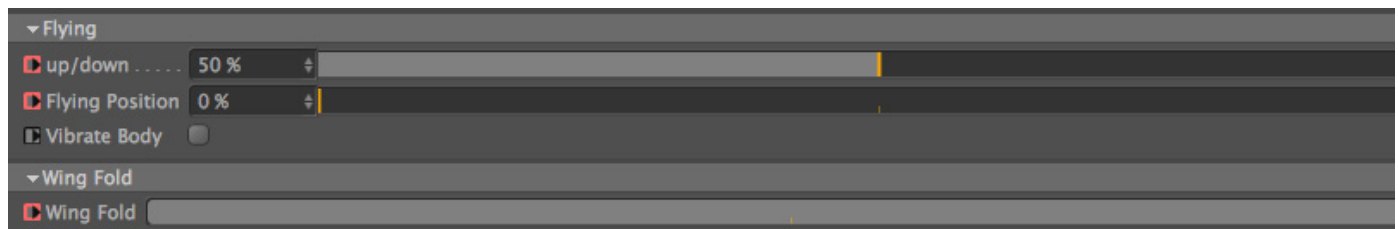


3.7d Xpresso control graph for the bird.



3.7e Xpresso controls for the bird.

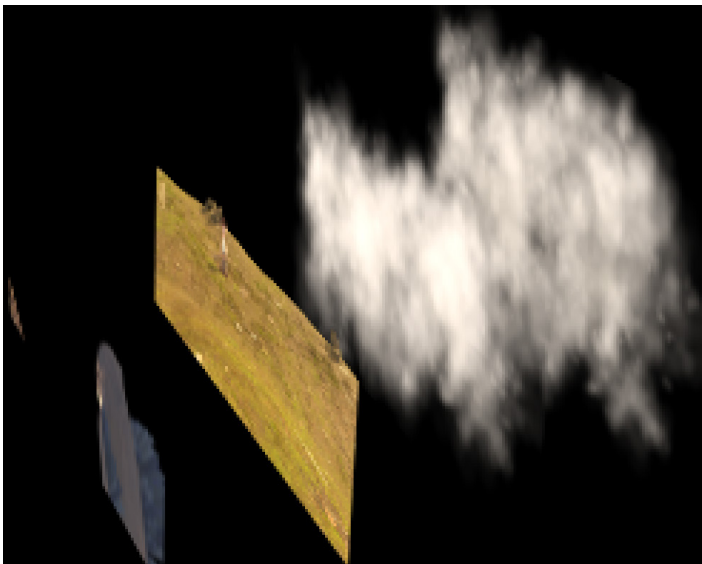
A contradiction however arose during the Xpresso process as the wings were being told to move by two different controllers: the control that flaps the wings and the one that folds them. If they are not in the proper place, the wings will become deformed and won't work properly. To counteract this difficulty, I tested out different combinations of the sliders and I marked where the sliders for each control had to be and what order they had to go in for the rendered images to properly show the correct sequence (See figure 3.7f).



3.7f The “up/down” bar had to be set at 50% to correctly move the “Wing Fold” bar and vice versa to control the “up/down” bar.

### 3.8 Layout

Because of timing complications and color corrections that needed to be fixed post render, I separated the shots into several layers. The characters and everything they interacted with are placed on one layer and the background and other objects are usually on another layer (See figure 3.8a). The first layer of clouds usually went either on the front or behind the island. Then the other layer of clouds is used to hide the background image. This method saved time during the render stages as part of the film’s background is still and did not need to be rendered in every frame.



3.8a An angled view of the layout in After Effects. Multipass layers are also applied such as specularity and shadows (not shown).

### 3.9 Post-Rendering

To save time in rendering, I decided to add the cloud particles in After Effects instead of in Cinema 4D. The clouds cover both sides of the islands to give the shots depth (see figures 3.9a and 3.9b) and were set to move at appropriate speeds to prevent stillness. Then I adjusted the color settings and added a low opacity vignette using Magic Bullet, a color grading plugin for Adobe programs to keep focus and better express the mood of each scene by changing the color.



3.9a First Island post-render.



3.9b Same image with a particle addition and color correction

### 3.10 Compositing

The music is called “Eastern Spectres” and was composed by Pete Hawkes and was used with permission. I wanted to add a strong ambient music for the audience to follow along with the story. Finding a balance between the sound effects and the music was important as one shouldn’t overshadow the other. Additionally, the music needed to flow along with the animation to provide a strong connection with each other.

Some sound effects were difficult to come by such as the sounds of trees falling. To combat this, I imported the sound to Premiere Pro CC and edited the tone and pitch of the audio with the equalizer. I made sure to note things such as the distance in which the audio comes from and adjust the volume to the noise. Then I imported the audio files back into After Effects and placed them in their appropriate setting.

## 04 Summary

### Feedback

Feedback for the final version came from two sources: my thesis committee and my classmates.

The majority of the positive comments were focused on the quality of the film, how the mood of each scene were set, and how some camera shots took place. An example of a well placed camera shot was when the bird was looking at the planter character and the camera focuses from the bird to the human walking.

Some shots needed to be re-rendered however due to factors such as camera positioning, and the timing of the animation, in particular the movement of the bird. There were some instances though where I adjusted the frame length using After Effects time remapping. This method was not used often as if the frames were stretched too far then there would be frame rate issues.

Additionally, some audience members suggested that I slow down certain parts of the film for aesthetic purposes. When the bird first lands, many people wanted the landing to be slowed down so they can appreciate the details of the bird. While I did not want to affect the overall performance of the bird, I did manage to slow down the movement enough so the audience can see the details without affecting the animation too much.



## 05 Conclusion

This was by far the most difficult project I have faced, as this was the first time I have completed a project on this scale. I have learned a lot however, from learning to use new programs, dealing with multiple feedback and requests, to better managing my time.

From the beginning of the project, I thought that by doing a small, simplified version I could complete it within a few months, yet because this was the first time in doing a project of this scale, I did not anticipate many unforeseen circumstances and the completion was delayed. There were many issues that I needed to resolve such as learning a new program that wouldn't cause errors.

In addition, I needed to prove that I am able to work with professional quality models if I wanted to obtain A career in 3D design so I changed the style of the animation. So I turned to tutorials on sites I wouldn't of otherwise gone to and completed exercises that not only taught the topic that I needed to learn to improve the thesis project but also helped improve my portfolio.

I realized that I needed to work with the strengths of multiple programs to obtain the outcome I wanted. I took the modeling strength of Maya, the texturing and workflow of Cinema 4D, and the editing and composting of After Effects to create the final version of this project.

In the future, I need to be more organized from the very beginning of the project and try to improve myself during production. I also need to learn how to develop a concept that the general audience will agree on, and learn how to manage time better.

I would like to thank my thesis committee and classmates for suggesting ways to improve both the project and myself.

# **06 Thesis Proposal**

**Rochester Institute of Technology**

**A thesis submitted to the Faculty of the College of Imaging Arts and Sciences**

**In candidacy for the degree of Master of Fine Arts**

**The Homeless Bird**

**By Kyle Griffin**

**October 21, 2012**

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## Abstract

The thesis will consist of a 1-2 minute motion graphics piece that tells the story of some of the consequences of deforestation. The consequences shown in this video are the forced migration of the animals. 3D graphics will be used from Autodesk Maya and edited in Adobe After Effects. The video is meant for young adults to watch without feeling strong emotions and empathize with the character.

## Problem Statement

Communicating with the public is an important element when producing a video that focuses on public concerns such as the environment or health. Stating too many facts, especially in texts, will distract the audience from the video. Playing with the audience's emotions, such as making them feel disgusted or guilt towards joining a cause is too noticeable and can actually deter them from receiving the message. People can attach to a character and empathize with them without being depressed from watching the clip.

The method of communicating the message for this thesis is showing a concern through story telling. Stories build up while leaking the point of the message to the audience and keeps them attached throughout the video. In addition, attachments towards characters can be formed when telling stories which leads towards empathizing with them. The video will lead viewers towards attaching to the bird and how he was forced out of his home by deforestation. When presented with a problem the bird figures out how to solve the problem by planting a tree. On looking spectators, who were facing the same problem as the bird, learned from him and planted a tree too. It takes just one person to make a difference. While the video uses inaccurate actions such as an intelligent bird and fast growing trees, these elements help the viewers learn from the bird's actions. This video will encourage people to learn on their own to care more for nature and try to find a balance between their own needs and having a healthy ecosystem.

Since the film does not consist of any text or speech, the challenge is to show the viewers the problem and a solution to help solve it. Using visual elements such as balancing metaphors and creating tension and suspense for the bird.

# Survey of the Literature

## Illustrations

Images from water.org

“Women.” Water.org. Water.org, n.d. Web. 08 July 2012. <<http://water.org/water-crisis/water-facts/women/>>.

Water.org is a charity organization that provides people in third world countries with clean accessible water. The informational graphics that they use on their website use a good color palette, sets the tone of the images through placement, and most important to viewers, the images are simple to understand. I plan to incorporate these elements into the project. Simple images help prevent viewers from being distracted over minor details like proportions and add a sense of fantasy to the images.

An issue to address in the project however is the use of text in information motion graphics. Aside from choosing an appropriate font, text can distract the viewers from the actions that the character presents. The message can still be communicated without the use of text through the actions of the characters.

Water Changes Everything by Jonathan Jarvis

Jarvis, Jonathan, comp. “Water Changes Everything.” Cartoon. Charity Water. Charity Water, 18 Apr. 2011. Web. 20 Sept. 2012. <<http://www.charitywater.org/whywater/>>.

Clean water drops represented the characters in this info-graphics piece. The colors had a powerful relationship to each other and the movements were simple and suffered no distractions. Yet the mood the film sets is primarily negative as they continued to talk about how safe water is inaccessible until the last minute when it talks about solutions. The clip seemed too heavy in facts, as it didn’t provide enough of a relief for viewers. Reliefs are important as they provide a time for viewers to let the information sink in and would be easier to remember.

## Storytelling

Oregon Humane Society 2009 commercial

Ketel, Leopold. "End Petlessness." Cartoon. Oregon Humane Society. Oregon Humane Society, 25 Sept. 2012. Web. 15 Sept. 2012. <[http://www.oregonhumane.org/adopt/OHS\\_TV\\_Commercial.asp](http://www.oregonhumane.org/adopt/OHS_TV_Commercial.asp)>.

This 2009 commercial features a monster attacking the city so the only way to stop it was to give it a dog to play with. The moral of the story is that adopting an animal can make anyone happy.

The mood of the clip did not steer the viewers into feeling guilty but instead gave a sense of humor and happiness as the monster finds a friend.

There is also a second commercial featuring a bird that flies around as people's problems are being solved by pets appearing from objects. This clip also does not play on human emotions and features a common character that people can attach to and know what is going to happen next.

Sarah McLachlan's Animal Cruelty Video

Sarah McLachlan Animal Cruelty Video. Perf. Sarah McLachlan. 2006. Television. Youtube. Youtube, 03 Oct. 2006. Web. 14 Sept. 2012. <<http://www.youtube.com/watch?v=9gspElv1yvc>>.

This communication strategy is something I want to avoid when communicating with the audience. This commercial uses a technique known as pathos where the clip uses depressing elements to appeal to the audience's emotions, making them feel sorry for the animals and wanting to help, either donate or adopt a pet. Several elements includes playing the song "Angel" by Sarah McLachlan, showing several clips of abused animals, and even an appearance of Sarah McLachlan herself, asking for the viewers to help the animals.

While this strategy does indeed connect with the audience, some viewers can see this as a deplorable attempt to connect with the viewers to get them to donate to the British Columbia Society for the Prevention of Cruelty to Animals. While emotional attachment is important to forming a connection, too much can be off putting. The video will have people connect with the bird through pity but then changes to fright as the people face problems due to the lack of trees. Finally there is a sense of relief at the end when the people find

a balance between their needs and maintaining a healthy environment.

Design Humor: The art of graphic wit by Steven Heller

Heller, Steven. Design Humor: The Art of Graphic Wit. New York: Allworth, 2002. Print.

Steven Heller uses a collection of humorous graphic design pieces and studies of advertising humor in different eras to show how humor can be an effective way of communicating with the audience. Studying the different eras and how much of an impact humor had on the designs presented will help decide what actions the characters should take. Although the mood will change to include other emotional elements, such as relief and shock, humor will lighten the seriousness of the film enough that it wouldn't turn people away.

The Lorax by Geisel Theodore

Geisel, Theodore. The Lorax. New York: Random House, 1971.

Theodore Geisel, known as Dr. Suess, created a story about the consequences of deforestation through the use of poetry and colors. The story involves a person who destroys an entire forest for the sake of profit, polluting the land and forcing the animals to leave. The message he was sending to the readers was sent without sending an extreme emotion like disgust or guilt.

Like Geisel's way of communicating, the thesis project will communicate with the audience by showing the meaning of the clip in a non-direct way. The people will come and clear the land for their own profit but will suffer the consequences of deforestation. The Lorax has a depressing ending to it however where the forest was too polluted to be fixed. The thesis project will offer some hope, as the main character will show people how to fix their mistake by planting a tree to cool off.

Another element that The Lorax possesses that the thesis does not is that there is a connection between the forest and the people through the Lorax himself. The Lorax was a representative of the forest and was ignored the whole time. The project will have no direct interacting between the animals and the people. The only indirect interactions that the two groups meet in are when the people cut down the tree the main character resides in and when the bird was planting a seed for himself and the people witness the action.

MTV's "One minute to think about it" by Piotr Karwas

One Minute to Think about It. Dir. Karwas Piotr. MTV, 2008. Television. [Http://twonky.com/](http://twonky.com/). 04 Dec. 2008. Web. 12 Oct. 2012. <<http://my.twonky.com/video?vid=69718812>>.

The clip shows a man with a chainsaw destroying the forest. When there is nothing left he chops off his own legs. The animation is 3D with the focus on the man as his design was different than the rest of the clip. I plan to use the same design concept in my project. The people in the video will be the same while the animals will be shown in a different design to draw attention to their actions.

## Design Ideation

During the project process, there are four main parts in this project:

Character illustration, environment design, effects, and animation.

Character illustration-----	Pusedo-2D silhouettes
	Adobe Illustrator
	Autodesk Maya
Environment design -----	3D toon shaded
	Autodesk Maya
	Autodesk Mudbox
	Adobe After Effects
Effects -----	Dust, fluids, and particles
	Autodesk Maya
	Adobe After Effects
	Trapcode plugin
Animation-----	Timing and motion
	Autodesk Maya
	Adobe After Effects

## Methodological Design

The project will be a 3D motion graphics piece targeted towards young viewers. Autodesk Maya and Adobe After Effects are the primary programs that will be used in making the project.

Length: 1:15 minutes

Audience: General Audience

Delivery: Broadcast



## Pragmatic Considerations

No budget is needed for this project, but audio will be created by the George Eastman School of Music and will need a request to compose music.

## Dissemination

Progress of the thesis will be updated on the thesis blog.

The film would initially be disturbed to public viewing websites such as Vimeo and Youtube for feedback and attention.

I will also submit to professional organizations:

Siggraph	TBA
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Adobe Design Achievement Awards	TBA
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CG Society	
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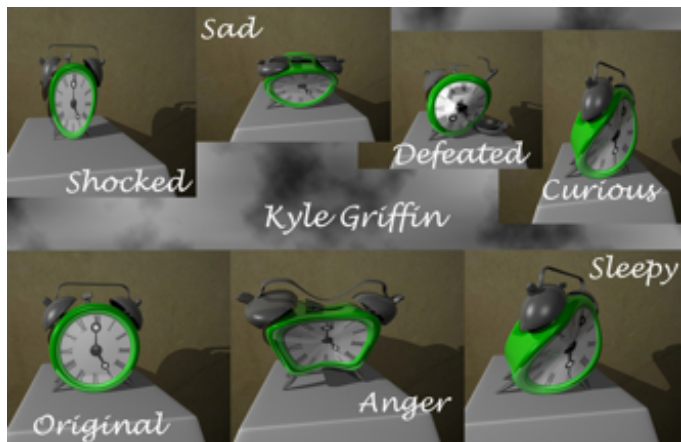
## Evaluation Plan

After the initial animation has been created, random viewers between 10 to 30 years old will view the project and evaluate it. They will determine what is strong and what needs improvement in areas of communicating the message, animation, timing, and other aspects of the film.

## Supporting Documents

### Fall 2011- 3D Modeling final Project

This exercise was to show the expressions of a non-organic object. A clock was used to express six different expressions: shocked, sad, defeated, curious, anger, and sleepiness. The human characters in the thesis project will not have faces so their actions will be what determine what they are thinking.



### Spring 2012 – Production Pipeline project

This project is to show my skills in 3D modeling, animation, and storytelling.

The main character shows a variety of emotions without facial expressions and the least amount of movements as possible. The environment sets the mood in that the city background was a dull, depressing, region. In contrast, the door has bright colors to make it seem out of place with the rest of the world and presents a heavenly light to show that inside the door is a different place. The emotional moods and body expressions will be present in the thesis project as expressions can describe more about a situation than words can.



Fall 2012- Motion Graphics II project one

This project was designed to focus on the timing and audio rhythm of the animation using abstract images. This project has taught about the relationship of each object with each other and how important each scene is to each other. Relationships will be established between the characters, the environments and colors to make the film more appealing to the viewers.



# Timeline

\*Each week begins on Monday

## November 2012

Week 1	Thesis Proposal Defense.
Week 2	Correct minor mistakes on proposal and hand it in.
Week 3	Design characters to rig.
Week 4	Create background environment of forest.

## December 2012

Week 1	Figure an effective rendering method for tree clones.
Week 2	Create clone trees.
Week 3	Design and rig buildings.
Week 4	Continue design.
Week 5	Create background environment of street.

## January 2013

Week 1	1st Committee Meeting.
Week 2	Clone buildings.
Week 3	Add extra objects
Week 4	Design Camp.
Week 5	Start animating 00-10secs.

## February 2013

Week 1	Animate 10-20secs
Week 2	Animate 20-30secs
Week 3	Animate 30-40secs
Week 4	Animate 40-50secs

March 2013

Week 1	Animate 50-70secs.
Week 2	Animate 70secs-end.
Week 3	Render.
Week 4	2nd committee meeting.

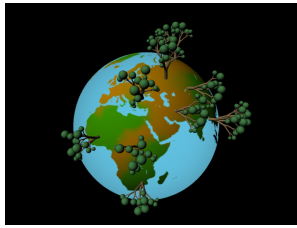
April 2013

Week 1	Correct errors in Animation.
Week 2	Import audio effects.
Week 3	Import and time music.
Week 4	Correct errors in audio.
Week 5	Render in After Effects.

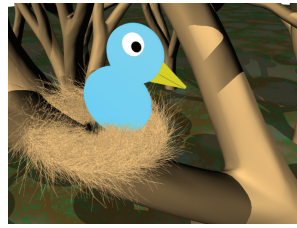
May 2013

Week 1	Thesis Defense.
Week 2	Edit mistakes.
Week 3	Thesis Show or Cont. thesis.

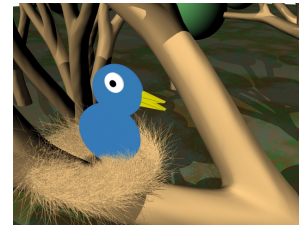
# Storyboard



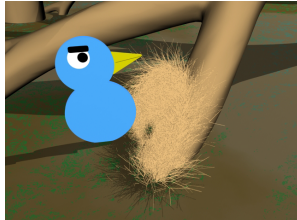
\*Opens with the earth spinning with exaggerated trees. (noticeable change)



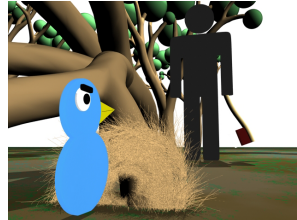
\*Zooms in to show a bird building his nest.



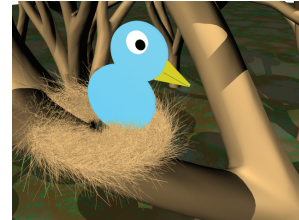
\*The tree is shaken and the bird is shocked by the movement before it is cut down.



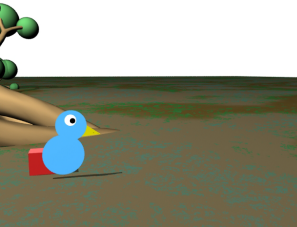
\*Bird climbs out of the mess and looks around to see what caused it.



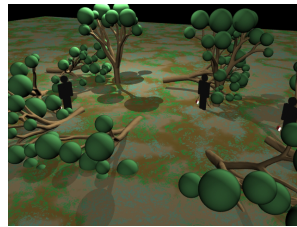
\*He sees lumberjacks walking around chopping trees down.



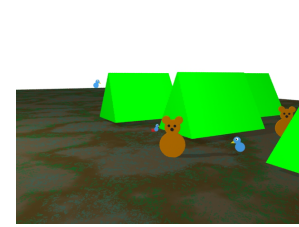
\* Moves into a new tree two more times. Each tree gets cut down.



\*He gives up and packs his stuff moving out of the woods.



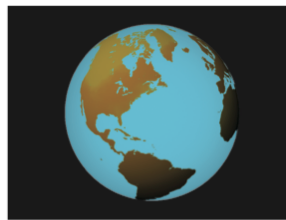
\*The people continue to cut the trees down until there is nothing left in the woods



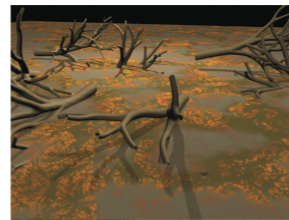
\*The bird travels a ways and arrives at a camp for the other animals.



\*Buildings start popping up in the woods (built like a box).



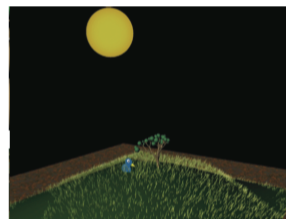
\*The trees around the globe pop off and the land becomes brown.



\*Camera pans across the once green woods now brown since theres no trees to hold moisture in.



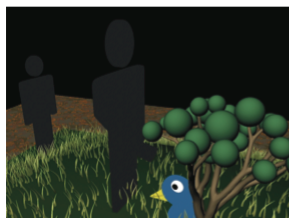
\*The character is traveling across the wasteland looking for a home.



\*He spots the last tree on a hill and goes to go see to it.



\*several people approach the tree, making the bird defensive.



\*The people instead start taking care of the tree cause its the last tree around. The bird is surprised.



\*Neighborhoods start taking care of their own trees and slowly grows overtime.



\*The camera zooms out with trees and buildings popping up symbolizing a need for balance.

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